

NOTES ON *AUPLOPUS CARBONARIUS*, A SPIDER WASP NEW TO THE UNITED STATES (HYMENOPTERA: POMPILIDAE)¹

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ABSTRACT: Six *Auplopus carbonarius* Scopoli have been captured in New York state within the past fifteen years, five since June 15, 1981. It may be assumed that this Palearctic species is firmly established in the northeastern United States.

Auplopus carbonarius Scopoli

Male — 5 mm to 6 mm in length; dorsum black, lacking iridescence; last tergum white; frons bears two longitudinal white stripes, one adjacent to each compound eye, starting just above the antennal sockets and extending down to the apical edge of the clypeus. Wings faintly infusate, forewing 6 mm long; second flagellar segment 2.5 times as long as wide; apical margin of the clypeus moderately concave.

Female — 8 mm to 9 mm in length; dorsum black, without iridescence; apical section of mandibles rufous. Wings faintly infusate, forewing 8 mm long; pygidial plate polished; second flagellar segment 4.0 times as long as wide; apical margin of clypeus broadly angled to form a rounded median point.

This species closely resembles *Auplopus variolarum* Townes and *Auplopus caerulescens subcorticalis* Walsh in Townes (1957) keys. The female is similar to *A. variolarum* but differs in having its legs wholly dark, the clypeus somewhat produced forming a rounded median point, and averaging slightly smaller in size. The male is similar to *A. caerulescens subcorticalis* but lacks the bluish iridescence on the thorax.

Auplopus carbonarius, like many other species of *Auplopus*, builds nests of mud, consisting of single, not side by side, tubes. The females collect small pellets of mud, using their mandibles and mental bristles, and build cells with rows of pellets. The mud is pressed into place with the tip of her gaster or pygidial plate. These barrel-shaped cells are flat topped and approx. 8-10 by 4-5 mm.

It is not known if the cells are constructed before or after the prey is paralyzed, but it is almost certain that it is after. After paralyzing the spider, but before taking it back to the nest, the wasp usually mutilates it. The significance of this habit is unknown. Perhaps this makes the paralyzed prey easier to carry or pack into a cell.

The nest are built in a variety of situations, such as on tree stumps, fences, under stones, under bark, in crevices of tree trunks and on walls.

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Nests may have been brought into this country in nursery stock or wood products.

One female *A. carbonarius* was captured in Nyack, New York on June 12, 1967, by M. Deyrup (collection of the American Museum of Natural History, New York). Since then five more have been captured in North Bellmore, New York since June 15, 1981, by V. Nolfo. It seems, in all probabilities, that this wasp is established here. One pair will be deposited in the collection at the U.S. National Museum, Wash., D.C.

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REFERENCES

- Richards, O.W. and Hamm, A.H. 1939. The Biology of the British Pompilidae (Hymenoptera). Trans. Soc. British Ent. 6: 51-114.
Townes, Henry. 1957. U.S. Nat. Mus. Bull. 209, 286 pps.
Wolf, Heinrich. 1972. Insecta Helvetica, pt. 5, Hymenoptera-Pompilidae, pps. 75-79.

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The following Opinions and Directions have been published by the International Commission on Zoological Nomenclature in the *Bulletin of Zoological Nomenclature*, volume 39, part 3, on 30 September, 1982:

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| Opinion No. | |
| 1218 (p. 166) | <i>Trombidium akamushi</i> Brumpt, 1910 (Acarina): designation of type species. |
| 1221 (p. 175) | <i>Baeocera</i> Erichson, 1845 (Insecta, Coleoptera): designation of type species. |
| 1222 (p. 178) | <i>Campylosteira</i> Fieber, 1844 (Insecta, Hemiptera): type species designated. |
| Direction No. | |
| 112 (p. 194) | PIERIDAE Duponchel, [1835] (Insecta, Lepidoptera): protected. |
| 113 (p. 196) | MORPHIDAE (Insecta, Lepidoptera): further correction to Official List entry. |

The Commission regrets it cannot supply separates of opinion.

R.V. Melville,
Secretary